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| APPLICATION NO. | . F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | O. CONFIRMATION NO. | |
|-----------------|---------|------------------|-----------------------|-------------------------|---------------------|--|
| 09/937,399 | | 11/28/2001 | Bruce McGarian | 66455-202-5 | 9414 | |
| 25269 | 7590 | 07/10/2003 | | | | |
| DYKEMA | | | EXAMINER | | | |
| 1300 I STRI | EET, NW | E, THIRD FLOOR V | GAY, JENNIFER HAWKINS | | | |
| WASHING | ron, dc | 20005 | | ART UNIT | PAPER NUMBER | |
| | | | | 3672 | | |
| | | | | DATE MAILED: 07/10/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No | • | Applicant(s) | 1 | | | | |
|---|--|---|---|--|--|--|--|--|--|
| 1 | | 09/937,399 | | MCGARIAN ET AL. | | | | | |
| | Office Action Summary | Examiner | | Art Unit | 7 | | | | |
| | | Jennifer H Gay | | 3672 | / \ | | | | |
| Period for | The MAILING DATE of this communication app Reply | ears on the cove | r sheet with the co | orrespondence address | 1 | | | | |
| THE M/ - Extension after SIX - If the period if NO period in Any replacement in Any replacement in the surface | RTENED STATUTORY PERIOD FOR REPLY ALLING DATE OF THIS COMMUNICATION. One of time may be available under the provisions of 37 CFR 1.13 (6) MONTHS from the mailing date of this communication. Indo for reply specified above is less than thirty (30) days, a reply riod for reply is specified above, the maximum statutory period we or reply within the set or extended period for reply will, by statute, y received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, how within the statutory mi rill apply and will expire cause the application t | ever, may a reply be time nimum of thirty (30) days SIX (6) MONTHS from to to become ABANDONED | ely filed will be considered timely. he mailing date of this communication. b (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | | |
| _ | Responsive to communication(s) filed on <u>05 J</u> | | . | | | | | | |
| • | , | is action is non-f | | 12 1 | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | | | | |
| 4)⊠ C | laim(s) 16-22 is/are pending in the applicatio | n. | | | | | | | |
| 4a |) Of the above claim(s) is/are withdrav | vn from consider | ation. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | | |
| 6)⊠ C | laim(s) <u>16-22</u> is/are rejected. | | | | | | | | |
| 7)□ C | laim(s) is/are objected to. | | | | | | | | |
| 8)□ C | laim(s) are subject to restriction and/or | election require | ment. | | | | | | |
| Application | Papers _ | | | | | | | | |
| 9)∐ Th | e specification is objected to by the Examiner | . . | | | | | | | |
| 10)□ Th | e drawing(s) filed on is/are: a)□ accep | ted or b)⊡ object | ed to by the Exam | niner. | | | | | |
| | Applicant may not request that any objection to the | | • | • • | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | | | | |
| | f approved, corrected drawings are required in rep | • | tion. | | | | | | |
| - | e oath or declaration is objected to by the Exa | aminer. | | | | | | | |
| | der 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| | cknowledgment is made of a claim for foreign | priority under 35 | 5 U.S.C. § 119(a) | -(d) or (f). | | | | | |
| a) <u></u> ☐ | All b)☐ Some * c)☐ None of: | | | | | | | | |
| 1. | Certified copies of the priority documents | have been rece | eived. | | | | | | |
| 2. | 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| | Copies of the certified copies of the prior application from the International Bure the attached detailed Office action for a list of the attached | eau (PCT Rule 1 | 17.2(a)). | • | | | | | |
| | nowledgment is made of a claim for domestic | | • | | ·n) | | | | |
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| | The translation of the foreign language provinced the translation of the translation o | • • | | | | | | | |
| Attachment(s) | | | | | | | | | |
| 2) 🔲 Notice o | References Cited (PTO-892) f Draftsperson's Patent Drawing Review (PTO-948) ion Disclosure Statement(s) (PTO-1449) Paper No(s) | 4) [] 5) [] 6) [] | | (PTO-413) Paper No(s) atent Application (PTO-152) | | | | | |
| S. Patent and Trade TO-326 (Rev. (| | tion Summary | | Part of Paper No. 11 | | | | | |

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DETAILED ACTION

Claim Objections

1. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 does not add any further structural limitations to the apparatus claim 16 thus is not considered to further limit the claim.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 is considered indefinite because the "wherein" statement in the last portion of the claim is generally confusing. It is unclear to the examiner as to what specifically the applicant is referring and how the "slope" reduces an "increase in stress in said slope".

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braddick (US 5,595,247) in view of GB 2313391.

Regarding claims 16 and 17: Braddick discloses a whipstock casing milling system. The system includes the following features:

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A whipstock (160) with a whipface (254).

- A first ramp surface (259) and a second ramp surface (254) that meets the first ramp at a junction (see Figure 8). The first ramp is relatively steep compared to the second ramp surface relative to the longitudinal axis of the whipstock so that the first ramp is disposed at a greater angle to the longitudinal axis than the second ramp.
- A window mill (256) operable to form an opening in wellbore casing (C). The milling elements of the mill engage the first ramp and are deflected by that ramp laterally into the casing. (See Figure 9)
- A protrusion (260) located on the whipface. The protrusion is an extension of the first ramp and together they form a mill-deflecting slope. As recited in column 14, lines 54-56, the protrusion will be partially milled off during the milling operation thus the protrusion will reduce the damage to the first ramp at the junction of the first and second ramp. The protrusion would also move the milling elements past the first ramp thus reducing the stress on the first ramp and the whipstock.

Braddick discloses all of the limitations of the above claims except for the mill being secured to the whipstock. In Figure 4, GB 2313391 teaches a mill that is secured to a whipstock where the whipstock includes a first and second ramped surface. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have secured the mill of Braddick to the whipstock as taught by GB 2313391 in order to have reduced the cost of the operation by only having to make one run into the wellbore.

Regarding claim 18: The protrusion is located on the second ramp (see Figures 8 and 9).

Regarding claims 19 and 20: The means for securing taught by GB 2313391 is a shear bolt (see page 13, lines 15-27). The examiner notes that it is well known in the art that bolts are a threaded fastener.

Regarding claim 21: The protrusion includes a surface that is ramped at the same angle relative to the longitudinal axis of the whipstock as the first ramp (see Figures 8 and 9).

Regarding claim 22: As seen in Figure 4 of GB 2313391, the angle of the first ramp surface is 15° relative to the longitudinal axis of the whipstock.

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6. Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2313391 in view of Braddick (US 5,595,247).

Regarding claims 16 and 17: GB 2313391 discloses a whipstock casing milling system. The system includes the following features:

- A whipstock (44) with a whipface (46).
- A first ramp surface (see Figure 4) and a second ramp surface (46) that meets the first ramp at a junction. The first ramp is relatively steep compared to the second ramp surface relative to the longitudinal axis of the whipstock so that the first ramp is disposed at a greater angle to the longitudinal axis than the second ramp.
- A window mill (32) operable to form an opening in wellbore casing (9). The milling elements of the mill engage the first ramp and are deflected by that ramp laterally into the casing. (See Figure 4) The mill is attached to the whipstock by a securing means (39).

GB 2313391 discloses all of the limitations of the above claims except for a protrusion extending from the first ramp.

Braddick teaches a whipstock that includes a protrusion (260) located on the whipface (254). The protrusion is an extension of the first ramp and together they form a mill-deflecting slope. As recited in column 14, lines 54-56, the protrusion will be partially milled off during the milling operation thus the protrusion will reduce the damage to the first ramp at the junction of the first and second ramp. The protrusion would also move the milling elements past the first ramp thus reducing the stress on the first ramp and the whipstock.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included the protrusion of Braddick on the whipstock of GB 2313391 in order to have protected the whipstock from being damaged (see col. 14, lines 40-58).

Regarding claim 18: As seen in Figures 8 and 9 of Braddick, the protrusion is located on the second ramp.

Regarding claims 19 and 20: The means for securing is a shear bolt (see page 13, lines 15-27). The examiner notes that it is well known in the art that bolts are a threaded fastener.

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Regarding claim 21: As seen in Figures 8 and 9 of Braddick, the protrusion includes a surface that is ramped at the same angle relative to the longitudinal axis of the whipstock as the first ramp.

Regarding claim 22: As seen in Figure 4, the angle of the first ramp surface is 15° relative to the longitudinal axis of the whipstock.

Response to Arguments

- 7. In view of applicant's amendment, the objections to the drawings have been withdrawn.
- 8. The 35 U.S.C. 112.2 rejections of claims 1-15 are moot in view of claims 1-15 having been cancelled by applicant's amendment.
- 9. Applicant's arguments with respect to claims 16-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

David Bagnell Supervisory Patent Examiner Art Unit 3672

JHG 000 July 8, 2003 William Neuder Primary Examiner